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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,008	11/23/2005	Peter John Miller	KILBU P-73 / 500728.	1716

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EXAMINER

WILLIAMS JR, RONALD E

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/522,008

Applicant(s)

MILLER ET AL.

Examiner

Ronald E. Williams

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to application filed on November 23, 2005.
2. Claims 1-16 have been examined.

Claim Objections

Claims 5-7 and 12-14 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative, and/or, cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-7 and 12-14 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

Claims 3 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 10 are indefinite for citing the phrase "first resistor of relatively high value". The Examiner is unsure as to what a relatively high value is.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda (**United States Patent Number: 4,709,341**).

Regarding Claim 1, Matsuda discloses:

A control system for a load, the system comprising a first microprocessor having an output to drive one side of a load, a second microprocessor having an output to drive the other side of the load, (*see Figure 3, elements 10a-10c and also see col 5, lines 39-41*) the system being arranged so that when either microprocessor detects a fault in the control of the load the load is switched off. (*see col 4, lines 27-31*)

Regarding Claim 2, Matsuda discloses:

A system according to claim 1 wherein both microprocessors monitor the current in the load. (*see col 1, lines 38-42*)

Regarding Claim 3, Matsuda discloses:

A system according to claim 1 or 2 wherein a first resistor of relatively high value is connected between a driver output of the first microprocessor and an input of the second microprocessor (*see col 4, lines 7-10*), to allow the second microprocessor to monitor if the first microprocessor is attempting to turn on the load. (*see col 7, lines 14-19*)

Regarding Claim 4, Matsuda discloses:

A system according to claim 3, wherein a second resistor with a value less than that of the first resistor, is connected between the output of the first microprocessor and a low voltage to ensure a driver controlling the load is off whenever the output of the first microprocessor is in a high resistance state. *(see col 4, lines 7-10 and also see col 4, lines 27-29)*

Regarding Claim 5, Matsuda discloses:

A system according to any preceding claim wherein at least one of the microprocessors is arranged to calculate the current of the load by measuring the voltage across it, and when the load current does not meet pre-determined criteria, to switch out the load. *(see col 4, lines 24-29)*

Regarding Claim 6, Matsuda discloses:

A system according to any preceding claim wherein the control system is a vehicular control system. *(see col 1, lines 61-68)*

Regarding Claim 7, Matsuda discloses:

A system according to any preceding claim wherein the load is a gear box selector, a clutch selector, or a valve. *(see col 3, lines 45-54)*

Regarding Claim 15, Matsuda discloses:

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A control system for a load, the system comprising a first microprocessor having an output to provide a drive signal to drive the load, a second microprocessor to monitor the operation of the first microprocessor and the operation of the load, the system being arranged so that when the second microprocessor detects a fault in the operation of the first microprocessor and/or the operation of the load, the second microprocessor is arranged to switch the load or halt the operation of the first microprocessor. *(see col 7, lines 14-21)*

Claims 8-14 and 16 are directed to the same subject matter as claimed throughout claims 1-7 and 15; therefore claims 8-14 and 16 are rejected under the same rationale as claims 1-7 and 15 cited above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald E. Williams whose telephone number is 571 272 2590. The examiner can normally be reached on MWF 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571 272 3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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RW